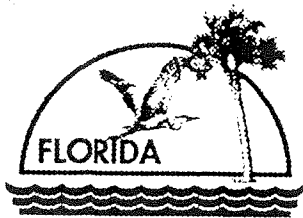


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LETTER REGARDING REGULATORY REVIEW AND COMMENTS ON DRAFT
CONFIRMATION SAMPLING PLAN FOR ARSENIC REMEDIATION AT GOLF COURSE NTC
ORLANDO FL
1/21/2000
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

09.01.00.0014
00605

January 21, 2000

Mr. David B. Twedell
Vice President/Principal Scientist
Nodarse & Associates, Inc.
1030 North Orlando Avenue, Suite A
Winter Park, Florida 32789

RE: Draft Confirmation Sampling Plan, Arsenic Soil Remediation
Project - Former Naval Training Center Golf Course, Orlando,
Orange County, Florida

Dear Mr. Twedell:

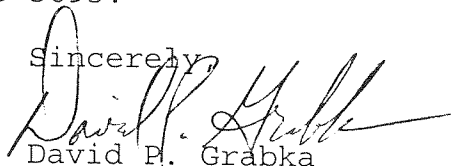
I have completed my review of the Draft Confirmation Sampling Plan for the former Orlando Naval Training Center Main Base Golf Course. I have the following comments that should be addressed or incorporated into the Final Confirmation Sampling Plan:

- (1) In order to determine the average arsenic concentration in soil for the interval from ground surface to 2 feet below ground surface, the composite samples to be collected should include a mixture of discrete grab samples from the 0 to 6 inch interval, the 6 inch to 1 foot interval, and the 1 foot to 2 foot interval. Sample volumes from the discrete intervals should be mixed in a 1:1:2 ratio, respectively, to provide a sample representative of the entire 2 foot soil column.
- (2) If the stainless steel bowl and stainless steel spoon, used to mix the discrete soil samples into a composite sample, are to be used at more than one sampling location, they should be decontaminated between each soil boring location.
- (3) Field decontamination should be accomplished by (1) thoroughly washing and scrubbing equipment with a non-phosphate laboratory detergent and tap water, (2) rinsing thoroughly with tap water, (3) rinsing thoroughly with deionized, analyte-free water, (4) rinsing with solvent (isopropanol), and (5) allowing the equipment to air dry as long as possible. This decontamination procedure was developed by the Orlando Partnering Team as a standard field decontamination procedure in NTC Orlando's Project Operations Plan for Site Investigations and Remedial Investigations (August 1997).

- (4) On page 5, it is stated that the locations of the former maintenance/pesticide mixing area and the old pesticide mixing area is shown on Attachment 2. Attachment 2 contains the EPA Standard Operating Procedures for sampling soil. I understand from our discussion January 18, 2000, that work is not going to be performed on areas within Study Areas 8 and 9. Section 3.0 of the confirmation sampling work plan indicates that work is to be performed in this area. This discrepancy needs to be resolved.
- (5) In our discussion on January 18, 2000, during the Orlando Partnering Team meeting, you stated that the confirmatory sampling to be collected would be used to make decisions on where soil will be required to be removed and where mixing/blending will reduce contaminant concentrations to levels agreed to in the Amendment No. 1 to the MOA. The general remedial action plan would utilize the information in the Tetra Tech and Universal Engineering reports in conjunction with data from the sampling proposed. Remediation would begin by removing soils from areas where two foot composite samples have concentrations greater than the clean up target level required at that location. The depth of the soils to be removed would be determined by analyzing discrete depth samples collected at the same time as the composite samples as well as the discrete depth sample concentrations in the Universal Engineering report. After the required soil removals have occurred, I understand that all areas of the golf course would then be tilled to mix soils within a 24-inch depth. This appears to be a rational method to remediate the golf course. How data from this composite sampling plan is to be used should be more explicitly explained in the work plan.

If I can be of any further assistance with this matter, please contact me at (850)488-3693.

Sincerely,



David P. Grabka
Remedial Project Manager

cc: Barbara Nwokike, Navy SouthDiv
Nancy Rodriguez, USEPA Region 4
Richard Allen, HLA, Jacksonville
Steve McCoy, TetraTech NUS, Oak Ridge
Steve Tsangaris, CH2M Hill, Orlando
Bill Bostwick, FDEP Central District

TJB



JJC



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